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APPLICATION NO.	FILING DATE	FIRST NAME INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/121,152	10/19/1998	STEVEN SAY KYOUN OW	20565-0111	2999

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EXAMINER

ALVO, MARC S

ART UNIT

PAPER NUMBER

1731

DATE MAILED 06/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/121 152	OW ET AL
Examiner	Art Unit
Steve Alvo	1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 07/518,935.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-25, 27-34 and 36-39 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese Patent Document '299

The claim of the instant case differ from those of the patented Parent Application in that they no longer exclude alkali and are not limited to a pH of less than 8.0. They now include a pH of 8.0 which is taught by the Japanese Patent Document '299. Japan '299 teaches dislodging ink from waste paper during pulping (disintegration) using an enzyme at a pH of 8.0. see page 2 of the translation, last line. See Example 2 for old newspaper. See page 3, lines 4-5, for temperatures of 40-90 °C for 0.5-360 minutes

Claims 21-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Document '299 if necessary with CAYLE et al.

Japan '299 teaches the use of cellulase as a deinking agent and teaches using a pH of 8.0. The bottom of page 2 states "cellulase ... can be used ... without any special restriction, although alkaline cellulase is especially preferred (Emphasis added). Clearly this reference encompasses

use of non alkaline cellulase, and page 4, lines 6-8 state acid or alkali can be added, and that the invention is not restricted to the examples. The first claim teaches cellulase alone as a deinking agent. Although page 3 says you may get better effect using a surfactant, etc, lines 14 and 15 clearly teaches cellulase decomposes the slurry and provides an excellent deinking effect. If even necessary, CAYLE et al is cited to teach cellulase enzymes from *Trichoderma viride* (acid enzymes) are known to aid in disintegration of waste paper including newsprint. Thus to have used such a cellulase in a medium having no added alkali would have been prima facie obvious to one of ordinary level of skill in the art, in fact Japan '299 says any cellulase without restriction may be used for deinking. If necessary CAYLE teaches 75-80% water, e.g. consistency of 20-25%, see claim 1 of CAYLE et al.

Claims 27 and 37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over GB 2,231,595.

The specific end point of a pH of 7.0 was not disclosed in the Parent Application. It was first disclosed in CIP Application 08/239,313, filed 5/6/1994, now Patent No. 5,785,809. Claims 27 and 37 have an effective filing date of 5/6/1994.

The GB Patent is the equivalent of the parent Application (07/518,935) and teaches everything except using a pH of 7.0. However, the claims include a pH of 3.0 which is specifically disclosed in the GB Patent, see page 4, line 17 of the G.B. Patent.

Claims 26 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2,231,595 in view of CAYLE et al.

The use of *Trichoderma viride* or *Aspergillus niger* were not disclosed in the parent Application 07/518,935. These enzymes were first disclosed in CIP Application 08/239,313, filed 5/6/1994, now Patent No. 5,785,809. Claims 26 and 35 have an effective filing date of 5/6/1994.

The GB Patent is the equivalent of the parent Application (07/518,935) and teaches everything except using *Trichoderma viride* or *Aspergillus niger* as the enzyme. CAYLE et al teaches cellulase enzymes from *Trichoderma viride* are known to aid in disintegration of waste paper including newsprint. It would have been obvious to use the enzyme of CAYLE et al as the disintegrating enzyme of the GB Patent.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993), *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985), *In re Van Orman*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982), *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 21-39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of U.S. Patent No. 5,785,809. Although the conflicting claims are not identical, they are not patentably distinct from each other.

because they only differ in scope. The instant claims are broader as they do not exclude the use of alkali. They also are not limited to a pH of less than 8.0. The instant claims are obvious over the claims of Patent No. 5,785,809.

When filing an **"Official"** FAX in Group 1730, please indicate in the Header (upper right) **"Official"** for papers that are to be entered into the file. The **"Official"** FAX phone numbers for this TC 1700 are

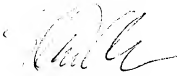
Non-Final Fax: (703) 872-9310 After-Final FAX: (703) 872-9311.

When filing an **"Unofficial"** FAX in Group 1730, please indicate in the Header (upper right) **"Unofficial"** for Draft Documents and other Communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers. The **"Unofficial"** FAX phone number for this Art Unit (1731) is **(703) 305-7115**.

Any inquiry concerning this communication or earlier communications from the **primary examiner** should be directed to **Steve Alvo** whose telephone number is **(703) 308-2048**. The Examiner can normally be reached on Monday - Friday from **6:00 AM - 2:30 PM (EST)**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Steve Griffin, can be reached on 703-308-1164.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is **703-308-0661**.


STEVE ALVO
PRIMARY EXAMINER
ART UNIT 1731